Amendments to the Claims

1. (previously amended) A method for geographic location determination based at least in part on inspection of a network address of a client, the method comprising:

performing a trace route between a server and the address of the client, the trace route identifying at least one domain name in a route between the server and the client;

identifying a construction format for the domain name, wherein the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned;

identifying a geographically significant component of the domain name;

determining a geographic location for the domain name based at least in part on the geographically significant component;

determining a possible geographic location of the client based on a geographically significant component of a text based network address corresponding to the client network address; and

validating the possible geographic location of the client using the determined geographical location of the domain name identified in the trace route, the validating returning a validated geographic location of the client.

2. (original) The method of claim 1, further comprising:

analyzing domain names associated with a network access provider so as to identify the construction formats for said domain names;

identifying geographically significant components of said construction components; and

storing cross-references between said geographically significant components and geographic locations in a storage.

3. (previously amended) The method of claim 1, wherein the validating further comprises:

performing a first geographic location determination for the network address based on a determined geographical location for the domain name returned in the trace route;

performing at least one alternate geographic determination for the network address based on at least one additional determined geographic location for at least one additional domain name returned from the trace route; and

selecting a validated geographic location of the client from either the first geographic location determination or one of the at least one additional determined geographic location determinations.

4. (previously amended) The method of claim 3, wherein the selecting further comprises:

ranking said determined geographic locations in accordance with the number of alternate geographic location determinations consistent with said determined geographic locations.

5. (original) The method of claim 1, further comprising:

providing a regular expression corresponding to the construction format;

matching the regular expression against the domain name; and

identifying a geographically significant portion of the regular expression so as to facilitate said identifying the geographically significant component of the domain name.

6. (original) The method of claim 1, wherein said performing the trace route is performed from the server to the client.

7. (original) The method of claim 1, wherein said performing the trace route is performed from the client to the server.

8. (previously amended) A method for determining a geographic location for a network address, comprising:

receiving a trace route comprising first and second network host identifiers for hosts disposed between a server and a client on a network;

matching the first network host identifier to a first template;

first parsing the first network host identifier according to the first template to determine a first geographically significant component, wherein the geographically significant component is derived from a construction format of the network host identifier, the network host identifier comprising a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned;

identifying an estimated geographic location for the client based at least in part on said first parsing;

matching the second network host identifier to a second template;

second parsing the second network host identifier according to the second template to determine a second geographically significant component; and

revising said estimated geographic location based at least in part on said second parsing.

9. (canceled)

10. (original) The method of claim 8, further comprising:

revising said estimated geographic location based at least in part on a client profile associated with the client.

11. (original) The method of claim 10, further comprising:

said client contacting the server with the web browser, said browser providing the client profile to the server.

12. (original) The method of claim 10, wherein the client profile is based at least in part on a customer database identifying the client.

13. (original) The method of claim 10, wherein the client profile is based at least in part on a mass-marketing database identifying the client.

14. (previously amended) A method of determining a geographic location, comprising:

creating a log comprising network addresses of clients that have communicated with a web server;

filtering the log so as to remove undesirable network addresses;

asynchronously performing a trace route between a first one of said filtered network addresses and the server regardless of a whether a previous geographic location for the first one of said filtered network addresses had been determined;

analyzing a result of said asynchronous performed trace route to ascertain a geographically significant component of at least one network address between a first one of said filtered network addresses and the server; wherein the geographically significant component is derived from a construction format of the network address ,where the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned; and

determining a geographic location for said first one responsive to said analyzing.

15. (original) The method of claim 14, further comprising:

generating a report comprising geographic locations for clients that have communicated with the web server.

16. (original) The method of claim 14, wherein said determining the geographic location comprises:

matching the result against a template identifying geographically significant portions of network addresses formatted in compliance with the template.

17. (canceled)

18. (currently amended) ~~An apparatus~~ A computer readable storage medium having instructions stored thereon for geographic location determination based at least in part on inspection of a network address of a client ~~comprising a readable medium having instructions encoded thereon for execution by a processor, said instructions capable of directing the processor to perform~~, the instructions when executed on a machine, cause the machine to:

~~performing~~ perform a trace route between a server and the address of the client, the trace route identifying at least one domain name in a route between the server and the client;

~~identifying~~ identify a construction format for the domain name, wherein the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned;

~~identifying~~ identify a geographically significant component of the domain name;

~~determining~~ determine a geographic location for the domain name based at least in part on the geographically significant component;

~~determining~~ determine a possible geographic location of the client based on a geographically significant component of a text based network address corresponding to the client network address; and

~~validating~~ validate the possible geographic location of the client using the determined geographical location of the domain name identified in the trace route, the validating returning a validated geographic location of the client.

19. (currently amended) The ~~apparatus~~ storage medium of claim 18, said instructions including further instructions capable of directing the processor to perform:

analyzing domain names associated with a network access provider so as to identify the construction formats for said domain names;

identifying geographically significant components of said construction components; and

storing cross-references between said geographically significant components and geographic locations in a storage.

20. (currently amended) The ~~apparatus~~ storage medium of claim 18, said instructions for validating include further instructions capable of directing the processor to perform:

performing a first geographic location determination for the network address based on a determined geographical location for the domain name returned in the trace route;

performing at least one alternate geographic determination for the network address based on at least one alternate determined geographic location for at least one additional domain name returned from the trace route; and

selecting a validated geographic location of the client from either the first geographic location determination or one of the at least one alternate determined geographic location determinations.

21. (currently amended) The ~~apparatus~~ storage medium of claim 20, wherein the selecting includes further instructions capable of directing the processor to perform:

ranking said determined geographic locations in accordance with the number of alternate geographic location determinations consistent with said determined geographic locations.

22. (currently amended) The ~~apparatus~~ storage medium of claim 18, said instructions including further instructions capable of directing the processor to perform:

providing a regular expression corresponding to the construction format;

matching the regular expression against the domain name; and

identifying a geographically significant portion of the regular expression so as to facilitate said identifying the geographically significant component of the domain name.

23. (currently amended) The ~~apparatus~~ storage medium of claim 18, wherein said performing the trace route is performed from the server to the client.

24. (currently amended) The ~~apparatus~~ storage medium of claim 18, wherein said performing the trace route is performed from the client to the server.

25. (currently amended) ~~An apparatus~~ A computer readable storage medium having instructions stored thereon for determining a geographic location for a network address, the instructions when executed on a machine, cause the machine to ~~comprising a readable medium having instructions encoded thereon for execution by a processor, said instructions capable of directing the processor to perform~~:

~~receiving~~ receive a trace route comprising first and second network host identifiers for hosts disposed between a server and a client on a network;

~~matching~~ match the first network host identifier to a first template;

first ~~parsing~~ parse the first network host identifier according to the first template to determine a first geographically significant component; wherein the geographically significant component is derived from a construction format of the network host identifier ,where the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network host, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network host is assigned;

~~identifying~~ identify an estimated geographic location for the client based at least in part on said first parsing;

~~matching~~ match the second network host identifier to a second template;

second ~~parsing~~ parse the second network host identifier according to the second template to determine a second geographically significant component; and

~~revising~~ revise said estimated geographic location based at least in part on said second parsing.

26. (canceled)

27. (currently amended) The ~~apparatus~~ storage medium of claim 25, said instructions including further instructions capable of directing the processor to perform:

revising said estimated geographic location based at least in part on a client profile associated with the client.

28. (currently amended) The ~~apparatus~~ storage medium of claim 27, said instructions including further instructions capable of directing the processor to perform:

said client contacting the server with the web browser, said browser providing the client profile to the server.

29. (currently amended) The ~~apparatus~~ storage medium of claim 27, wherein the client profile is based at least in part on a customer database identifying the client.

30. (currently amended) The ~~apparatus~~ storage medium of claim 27, wherein the client profile is based at least in part on a mass-marketing database identifying the client.

31. (currently amended) An ~~apparatus~~ storage medium having instructions stored thereon for determining a geographic location ~~comprising a readable medium having instructions encoded thereon for execution by a processor, said instructions capable of directing the processor to perform~~ , the instructions when executed on a processor, cause the processor to:

creating a log comprising network addresses of clients that have communicated with a web server;

filtering the log so as to remove undesirable network addresses;

asynchronously performing a trace route between a first one of said filtered network addresses and the server regardless of a whether a previous geographic location for the first one of said filtered network addresses had been determined;

analyzing a result of said asynchronous performed trace route to ascertain a geographically significant component of at least one network address between a first one of said filtered network addresses and the server; wherein the geographically significant component is derived from a construction format of the network address ,where the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned; and

determining a geographic location for said first one responsive to said analyzing.

32. (currently amended) The ~~apparatus~~ storage medium of claim 31, said instructions including further instructions capable of directing the processor to perform:

generating a report comprising geographic locations for clients that have communicated with the web server.

33. (currently amended) The ~~apparatus~~ storage medium of claim 31, wherein said instructions for determining the geographic location comprises instructions for:

matching the result against a template identifying geographically significant portions of network addresses formatted in compliance with the template.

34. (canceled)

35. (currently amended) An apparatus for geographic location determination based at least in part on inspection of a network address of a client, the apparatus comprising:

a server communicatively coupled to a network, wherein a plurality of client nodes reside on the network;

performing means coupled to at least one of the server and client for performing a trace route between ~~a~~ the server and the address of a client being one of the plurality of client nodes ~~the client~~, the trace route identifying at least one domain name in a route between the server and the client;

identifying means coupled to the server for identifying a construction format for the domain name;

identifying means coupled to the server for identifying a geographically significant component of the domain name; and

determining means coupled to the server for determining a geographic location for the domain name based at least in part on the geographically significant component; wherein the geographically significant component is derived from a construction format of the domain name, where the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a

particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned;

determining means coupled to the server for determining a possible geographic location of the client based on a geographically significant component of a text based network address corresponding to the client network address; and

validating means coupled to the server for validating the possible geographic location of the client using the determined geographical location of the domain name identified in the trace route, the validating means to return a validated geographic location of the client and store the validated geographical location of the domain name in a database residing on a storage device coupled to the server.

36. (currently amended) The apparatus of claim 35, further comprising:

analyzing means coupled to the server for analyzing domain names associated with a network access provider so as to identify the construction formats for said domain names;

identifying means coupled to the server for identifying geographically significant components of said construction components; and

storing means coupled to the server for storing cross-references between said geographically significant components and geographic locations in a storage.

37. (previously amended) The apparatus of claim 36, wherein the validating means further comprises:

determining means to perform a first geographic determination for the network address based on a determined geographical location for the domain name returned in the trace route;

the determining means to perform at least one alternate geographic determination for the network address based on at least one alternate determined geographic location for at least one additional domain name returned from the trace route; and

selection means to return a validated geographic location of the client selected from either the first geographic location determination or one of the at least one alternate determined geographic location determinations.

38. (currently amended) An apparatus for determining a geographic location for a network address, comprising:

a server communicatively coupled to a network, wherein a plurality of client nodes reside on the network;

receiving means for receiving a trace route comprising first and second network host identifiers for hosts disposed between ~~a~~ the server and a client being one of the plurality of client nodes on a network;

matching means for matching the first network host identifier to a first template;

parsing means for first parsing the first network host identifier according to the first template to determine a first geographically significant component of the first network host identifier; wherein the geographically significant component is derived from a construction format of the network host identifier ,where the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network host, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network host is assigned;

identifying means for identifying an estimated geographic location for the client based at least in part on said first parsing;

the matching means for matching the second network host identifier to a second template;

the parsing means for second parsing the second network host identifier according to the second template to determine a second geographically significant component of the second host identifier; ~~and~~

revision means for revising said estimated geographic location based at least in part on said second parsing; and

storing means for storing said estimated geographical location in a storage coupled to the server.

39. (canceled)

40. (original) The apparatus of claim 38, further comprising:

revising means for revising said estimated geographic location based at least in part on a client profile associated with the client.

41. (currently amended) An apparatus for determining a geographic location, comprising:

a web server communicatively coupled to a network, wherein a plurality of client nodes reside on the network;

creating means for creating a log comprising network addresses of one or more clients of the plurality of client nodes that have communicated with a the web server;

filtering means for filtering the log so as to remove undesirable network addresses;

asynchronous tracing means for asynchronously performing a trace route between a first one of said filtered network addresses and the server regardless of a whether a previous geographic location for the first one of said filtered network addresses had been determined;

analyzing means for analyzing a result of said asynchronous performed trace route and for ascertaining a geographically significant component of at least one network address between a first one of said filtered network addresses and the server; wherein the geographically significant component is derived from a construction format of the network address, where the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned; ~~and~~

determining means for determining a geographic location for said first one responsive to said analyzing; and

storing means for storing the geographical location in a storage coupled to the web server.

42. (original) The apparatus of claim 41, further comprising:

generating means for generating a report comprising geographic locations for clients that have communicated with the web server.

43. (original) The apparatus of claim 41, wherein said determining means for determining the geographic location comprises:

matching means for matching the result against a template identifying geographically significant portions of network addresses formatted in compliance with the template.

44. (previously presented) The method of claim 1, wherein identifying a geographically significant component of the domain name and network address comprises:

performing one of lexical analysis or pattern matching on the domain name and the text based network address to match against known formats; and

selecting a likely geographically significant component using a deductive algorithm to analyze the domain name and text based network address.

45. (previously presented) The method as recited in claim 44, wherein the deductive algorithm comprises one of an expert system or rule based system.

46. (previously presented) The apparatus of claim 18, wherein identifying a geographically significant component of the domain name and network address comprises:

determination component for performing one of lexical analysis or pattern matching on the domain name and the text based network address to match against known formats,; and

selection component for selecting a likely geographically significant component using a deductive algorithm to analyze the domain name and text based network address.

47. (currently amended) The ~~method~~ apparatus as recited in claim 46, wherein the deductive algorithm comprises one of an expert system or rule based system.

48. (previously presented) The apparatus of claim 25, wherein determining a geographically significant component of the domain name and network address comprises:

determination component for performing one of lexical analysis or pattern matching on the domain name and the text based network address to match against known formats; and

selection component for selecting a likely geographically significant component using a deductive algorithm to analyze the domain name and text based network address returned from the parsing.

49. (currently amended) The ~~method~~ apparatus as recited in claim 48, wherein the deductive algorithm comprises one of an expert system or rule based system.

50. (previously presented) The method of claim 14, wherein analyzing a result of said asynchronous performed trace route further comprises:

selecting a first and second network address in the trace route;

performing a reverse address lookup of the first and second network address and the first one of said filtered network addresses, the first one of said filtered network addresses corresponding to a client, the performing to derive a first and second text based network address and client text based network address;

performing one of lexical analysis or pattern matching on the first and second text based network address and the client text based network address to match against known formats; and

selecting a likely geographically significant component for each text based network address using a deductive algorithm to analyze the text based addresses; and

returning the likely geographically significant components for use in the determining a geographic location for the client.